Appl. No. 09/986,764

Doc. Ref.: AR54

## PATENT ABSTRACTS OF JAPAN

(11)Publication number:

05-175734

(43) Date of publication of application: 13.07.1993

(51)Int.CI.

H03D 3/00

G11B 20/06

(21)Application number : **03-342656** 

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(22)Date of filing:

25.12.1991

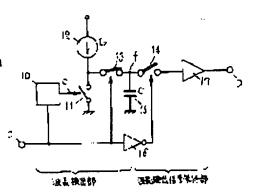
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## (54) FM DEMODULATOR

## (57) Abstract:

PURPOSE: To provide the FM demodulator easily integrated with simple circuit configuration by using a prescribed short range among detection ranges of a wavelength detector from which a signal of a period for each half wavelength of an input FM signal is outputted.

CONSTITUTION: A wavelength detection section generates a signal used to drive a reset switch SW11, a wavelength detection SW13 and a hold SW14 from an input signal. A wavelength detection signal voltage in response to a length from the leading till the trailing of the input signal is generated from a hold capacitor 15 driven by the drive signal from the SWs 11, 13 when the input signal falls down. Moreover, the SW 14 holds and outputs the wavelength detection signal. A voltage VC across the capacitor 15 is IO/2CF, where IO is a current from a constant current source, C is a capacitance of the capacitor 15, and F is a frequency of the input signal. The relation of  $\Delta VC=-(IO/2C)\Delta F$  is in existence for a narrow frequency  $\Delta F$  in the input frequency F, and then FM demodulation is attained by limiting the input frequency F into the narrow frequency range.



## **LEGAL STATUS**

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

Number of appeal against examiner's decision of

rejection]
[Date of requesting appeal against examiner's decision of rejection]
[Date of extinction of right]

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